Review Comments
Revised Work Plan for Source Control Measure Implementation and Stormwater Sampling Activities
Wilhelm Trucking Company
3250 NW St. Helens Road
Portland, Oregon
Dated March 12, 2015

Review Submitted July 24, 2015

Following are the United States Environmental Protection Agency's (EPA) comments on the March 12, 2015 document entitled, Revised Work Plan for Source Control Measure Implementation and Stormwater Sampling Activities, Wilhelm Trucking Company, 3250 NW St. Helens Road, Portland, Oregon (Revised Work Plan) prepared by Hahn and Associates, Inc. The site is located within the City of Portland's Outfall Basin No. 18 and listed on DEQ's Environmental Cleanup Site Information (ECSI) as site number 69.

EPA understands the objective of the Work Plan is to describe existing and proposed stormwater source control measures and sampling activities at the Wilhelm facility. The Revised Work Plan was prepared to address Oregon Department of Environmental Quality (DEQ) comments to the original Work Plan, which was submitted in December 2013.

EPA's review and subsequent comments are focused on the March 12, 2015 Revised Work Plan. Notably there were other documents referenced in the document that, if available, could provide additional background information that may revise our comments below.

General Comments

1. Based on the information presented in the Revised Work Plan, Wilhelm has implemented advanced source control measures (e.g. an oil/water separator) that may be effective in reducing contaminant concentrations in stormwater discharges. However, results from the first stormwater sample collected March 28, 2014 exceed the Portland Harbor Joint Source Control Strategy (JSCS) Screening Level Values (SLVs) for metals and PAHs. The results of future stormwater monitoring efforts will need to be reviewed to determine the effectiveness of source control measures implemented at the Wilhelm facility.

2. Results from the stormwater sample collected March 28, 2014 also exceed 2015 EPA Preliminary Remediation Goal (PRG) values developed for Remedial Action Objectives (RAO) 3 and 7. Comparison of stormwater results to PRGs is considered relevant since stormwater from the Wilhelm facility is discharged to the City stormwater system and subsequently the Willamette River without further treatment. Contaminants that exceeded RAO 3 (human

receptors) values include arsenic, BEHP, PCBs (reporting limit greater than PRG), and PAHs. Contaminants that exceeded RAO 7 (ecological receptors) include copper, zinc, and PAHs.

3. The Revised Work Plan focuses on source control measure implementation and stormwater monitoring within Tax Lot 600. In order properly characterize stormwater discharges from the entire Wilhelm facility, the work plan should be expanded to include stormwater monitoring from all stormwater basins (Tax Lot 600 Basin #7, Tax Lot 700, and Tax Lot 800).

Specific Comments

1. Section 2.2 Stormwater Management System, Tax Lot 600, Pages 2-4: For a full understanding of existing source control measures, this section should provide additional description of the new two-chamber storm drain catch basins, the sedimentation interceptor manhole, and the oil/water separator. Additional information should include dimensions, sediment storage capacities, a schematic of the oil/water separator, and a description of the coalescing plate media.

2. Section 2.2 Stormwater Management System, Tax Lots 700 and 800, Pages 5-6: Based on Figure 3, it appears that surface flows from Tax Lots 700 and 800 do have potential to enter the City storm drain system. Flows entering the railroad easement potentially discharge to catch basins AAX288 and ANF152, and flows entering NW St. Helens Road potentially discharge to catch basins ANF157, ANF154, and ANF151. The potential for stormwater runoff from Tax Lots 700 and 800 entering the City storm drain system should be described in the Revised Work Plan including possible flow paths and occurrence frequencies.

3. Section 3.0 Source Control Measure Implementation, Geotextile Fabric Installation on Unpaved Areas (Contingency), Page 10-11: The results of a single stormwater sample collected in March 2014 are an insufficient basis for the conclusion that the new treatment system and asphalt paving are working extremely well to reduce contaminant concentrations discharged from Tax Lot 600. The need for geotextile fabric and crushed gravel should be reevaluated based on the results of the proposed stormwater sampling activities (4 total samples).

4. Section 3.0 Source Control Measure Implementation, Tax Lot 8000, Catch Basin 8 and Vicinity (Proposed Spring/Summer 2015), Page 11: The proposed capping of unpaved areas with new asphalt pavement will result in increased stormwater discharges from Tax Lot 800 to the City storm drain system on NW St. Helens Road. Although this source control measure may be effective, samples of stormwater leaving Tax Lot 800 should be collected to characterize contaminant concentrations and evaluate effectiveness of source control measures.

5. Section 4.0 Stormwater Sampling Plan, Page 11-12:

    a. The Revised Work Plan states that four (4) stormwater sampling events will be conducted during the 2013-2014 and 2014-2015 rain years. Since only one stormwater sample has been collected subsequent to source control implementation (March 28, 2014), the stormwater sampling will likely need to be extended into the 2015-2016 rain year. The work plan should be revised accordingly.

b. Although contaminant concentrations have been reduced as a result of improved source control measures, the sample results in Appendix B indicate that concentrations for several metals (arsenic, cadmium, copper, lead, and zinc) and PAHs exceed Portland Harbor JSCS SLVs. However, since these results are from a single discharge event, he overall effectiveness of source control measures cannot be determined until additional storm event sampling is completed.

c. Summary statistics or graphics should be prepared to compare contaminants currently being analyzed under the stormwater monitoring plan to concentrations detected in previous stormwater monitoring performed at the facility during 2012 as presented in Appendix B. The statistical/graphical analysis should help address whether the new stormwater treatment system installed during Fall 2013 has reduced pollutant concentrations and by how much.

6. Section 4.1 Stormwater Sampling Criteria, Stormwater Sampling Location, Page 12: In order to properly characterize stormwater discharges from the entire Wilhelm property, stormwater samples should also be collected from runoff leaving Tax Lot 600 Basin #7, Tax Lot 700, and Tax Lot 800. EPA cannot determine whether these areas pose a risk of Willamette River sediment recontamination based on information presented in the Revised Work Plan. If stormwater runoff from these areas does not enter the City storm drain system, as stated previously in the Revised Work Plan, visually inspections during sampled discharge events should be conducted to document flow paths and infiltration areas. The inspection results should be documented in future stormwater monitoring reports.

7. Section 4.1 Stormwater Sampling Criteria, Stormwater Sampling Schedule, Page 12: Refer to Specific Comment 4a above and revise stormwater sampling schedule accordingly.

8. Section 4.1 Stormwater Sampling Criteria, Storm Event Criteria and Selection, Page 13: The Revised Work Plan should describe the process for evaluating sample representativeness to confirm that the storm event criteria are met. Sample results collected from events that do not meet the storm event criteria may not be suitable for evaluating source control measures, and use of these data should be qualified in stormwater monitoring reports.

9. Appendix A, Stormwater Pollution Control Plan: The Stormwater Pollution Control Plan should describe maintenance requirements associated with the recently installed two-chambered catch basins.

10. Appendix B, Performance Stormwater Sampling, Interim Letter Report 1st Sampling Event (March 2014): The stormwater sampling report un-numbered figure entitled "March 27-28 Hydrograph" shows that sample collection missed the storm event peak runoff period. As requested by DEQ, future storm event sampling should target peak runoff periods to attempt or achieve sample collection during a bypass overflow.